Orangeville Wetland Mitigation Site

IDOT has constructed an exemplary wetland mitigation site as compensation for unavoidable wetland impacts. The impacts were due to the construction of a relocated roadway and a new bridge over Richland Creek near Orangeville. A total of 4.7 acres of wetlands were affected during highway construction requiring the replacement of 8.5 acres of wetlands. The total area of the mitigation site is 16.7 acres. The mitigation site fits harmoniously into the surrounding environment and consists of creation and restoration of emergent marsh and wet meadow habitats.

The benefits being provided by the wetland mitigation site include:

- Habitat for great blue herons, Canada geese, cliff swallows, and the state threatened sandhill crane,
- Water quality improvement, and
- Flood retention.

Dan Ryan Reconstruction Project, Air Quality Mitigation Strategies

IDOT has taken unprecedented steps to mitigate air quality for the Dan Ryan Reconstruction Project as part of IDOT's environmental commitments. To reduce potential impacts, specific air quality control provisions were implemented requiring contractors to control their dust and to undertake appropriate mitigation procedures such as:

- Watering,
- Sweeping streets,
- Applying dust suppressants, and
- Restricting engine idling.

IDOT also required contractors to use Ultra-Low Sulfur Diesel Fuel (ULSD) or use emission control devices with On-Road diesel fuel. ULSD contains a low level of sulfur (15 ppm) and has 5-7% less particulate matter. In addition, IDOT installed air quality monitoring equipment along the Dan Ryan and other sensitive receptors such as schools and parks in the nearby community. This equipment monitors various pollutants, including particulate matter. The information gathered will help IDOT evaluate the effectiveness of the air quality mitigation strategies.

Roadside Prairie Inventory

IDOT owns a large amount of prairie because many of the native prairie remnants occur along roadsides parallel to railroads. Prairie communities are of special concern in Illinois because of their rarity, species diversity, and vulnerability to habitat degradation. IDOT, in cooperation with botanists from the Illinois Natural History Survey, conducted an inventory of all native prairie remnants occurring along Illinois roadsides. Data from this study are being used in the following ways:

- As a screening tool for highway and bike trail projects as part of IDOT's coordination agreement with the Illinois Department of Natural Resources, and
- For roadside management by IDOT District staff.

The type of information collected for each site included its location, quality, size, distance from edge of pavement, and species list. Maps and written reports were produced for each IDOT District, and the maps are accessible to staff through on-line GIS tools.

Historic Bridge Programmatic Agreement

IDOT continues to work with the Federal Highway Administration and the Illinois Historic Preservation Agency to preserve significant historic bridges. These structures range from 1830s small stone arch bridges along the National Road (Old US 40) to modern 20th century structures such as the Chicago Jackson Park Bridge with its whimsical animal head decorations. Also included are huge concrete and steel structures built as part of the mid-century interstate system.

Under the stipulations of a Programmatic Agreement, IDOT protects examples of every major bridge type over 50 years old. This agreement allows the completion of bridge replacement projects in a timely fashion and ensures public safety while protecting significant aspects of our built environment.

02/11, web

State of Illinois
Illinois Department of Transportation

IDOT ENVIRONMENTAL INITIATIVES

The mission of the Illinois Department of Transportation is to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity, and demonstrate respect for our environment. We will accomplish our mission while making the following principles the hallmark of all our work: safety, integrity, responsiveness, quality and innovation.

In order to provide an awareness of actions IDOT is taking to demonstrate respect for our environment, this brochure identifies several environmental initiatives. These initiatives are successful due to our partnerships with resource agencies, communities, and the general public.

Illinois Department of Transportation

Janey B. Goode Archaeological Site

To fulfill the requirements of the National Historic Preservation Act the IDOT, in conjunction with professional archaeologists from the University of Illinois, conducted multi-year excavations at the Janey B. Goode Site. This major prehistoric archaeological site is located in southwestern Illinois. During the development of the Route 3 Relocation project, engineering and environmental constraints made it impossible to avoid this large prehistoric village located on the banks of a former channel of the Mississippi River north of East St. Louis. The people who lived at this site over a period of three centuries laid the foundation for the huge Cahokia ceremonial center six miles to the southeast. Around AD 1,000, they became subjects of the powerful Cahokian chiefdom. Field work by the archaeologists, with crews of as many as one hundred individuals, has resulted in the excavation of several hundred prehistoric houses and thousands of hearths, storage pits, and postmolds. This especially rich, internationally recognized site has yielded tens of thousands of stone tools, pottery fragments, and other cultural materials. The project has led to significant new knowledge concerning the rise and fall of the largest prehistoric chiefdom in North America.

Prairie Parkway Seeps

During environmental evaluations for the Prairie Parkway project, the Illinois Natural History Survey identified a high-quality seep on the south side of the Fox River. A seep is an area where groundwater is discharged at the surface. This site may be a candidate for listing on the Illinois Natural Areas Inventory. In addition, botanical surveys performed within the area identified two small plant populations of the state endangered American brooklime *(Veronica americana)*. Working in conjunction with federal and state agencies, potential alignment alternatives were evaluated to determine if direct impacts to the seep complex could be avoided or minimized. To make this determination, groundwater monitoring wells were installed to characterize the site geology and identify and map aquifers supplying ground water to the seeps. Based upon the results of these studies, the proposed alignment was relocated 300 feet east of the seep boundary and will avoid direct impacts to the seep complex.

Wetland Mitigation Bank Sites

The creation of a large wetland mitigation area, or bank, is one way to compensate for many small acreages of wetland impact. As part of IDOT's commitment to wetland compensation, two state-sponsored banks have been established in Illinois:

- The 850-acre Morris site located in north-central Grundy County
- The 1,640-acre La Grange site located in extreme northeastern Brown County.

Impacts within the bank's approved service area may be mitigated at the bank. A service area is the designated area, such as a county or watershed, where the bank will likely provide appropriate compensation for wetland impacts. At these sites, wetlands will be restored in advance of unavoidable losses from highway projects. Wetland banks provide habitat for many plant and animal species, reduce permit processing times, and present more cost-effective mitigation opportunities.

Native Plant Program

IDOT and the Illinois Department of Natural Resources (IDNR) have established an agreement for habitat restoration using native plant materials. IDNR provides tree seedlings and plant stock for restoration. These materials are utilized statewide on a variety of highly visible areas such as city entry points, interchanges, and the Interstate Rest Areas System. The program makes the following available to IDOT:

- Over 40,000 tree seedlings,
- Over 20,000 native forb root stock, and
- Hundreds of pounds of native grass and forb seed.

The plants and seed are installed thanks to the efforts of IDOT employees, local communities, park districts, and volunteer groups.

For More Information about IDOT environmental initiatives

Illinois Department of Transportation
Bureau of Design and Environment
Environment Section, Room 330 • 2300 South Dirksen Parkway
Springfield, Illinois 62764
217/782-4770
www.dot.il.gov/environment.html

Translocation of State Threatened Forked Aster

IDOT worked closely with the Illinois Department of Natural Resources (IDNR) and the Illinois Natural History Survey (INHS) in order to avoid and/or minimize impacts to the state threatened forked aster *(Aster furcatus)* during the construction of the Route 71 project through Starved Rock State Park. The INHS conducted plant surveys and found populations of the forked aster in the project area.

The population that occurred near a culvert could not be avoided. Discussions among IDNR, INHS, and IDOT staff resulted in an agreement to do the following:

- Dig the plants that were in the construction zone,
- Store the plants at a native plant nursery during construction, and
- Replant the plants in their original sites after construction was completed.

The plants were kept over the winter at a nursery and were replanted in the spring of the year following construction. The survival rate of the plants that were overwintered was considered better than average. The replanted forked asters will be monitored for three years.

Indiana Bat Blue Ribbon Study

IDOT is working with the Illinois Natural History Survey and the U.S. Fish and Wildlife Service (USFWS) to determine the distribution of the federally endangered Indiana bat *(Myotis sodalis)*. The USFWS has recently requested that bat surveys be conducted for the majority of transportation projects in the northeastern region of Illinois. This initiative involves a series of field surveys of areas that contain potential habitat for the bat in order to determine the presence or absence of the species. If the results indicate that the Indiana bat does not inhabit these areas, an agreement will be established between USFWS and IDOT resulting in expedited natural resource agency coordination for transportation projects.